Mobile SATA Spinpoint MP4



Capacity		250GB	320GB	500GB	640GB
Model	16 MB	HM250HJ	HM320HJ	HM500JJ	HM640JJ

FEATURES

- Max. 320GB formatted capacity per disk
- SATA Native Command Queuing Feature
- TuMR/PMR head with FOD technology
- Serial ATA 3.0Gbps Interface Support
- Load/Unload Head Technology

DRIVE CONFIGURATION

- ATA Security Mode Feature Set
- ATA S.M.A.R.T. Feature Set
- SilentSeek™
- NoiseGuard™

DRIVE CONFIGURATION	
Capacity ¹	250 / 320 / 500 / 640 GB
Interface	SATA 3.0Gbps
Buffer DRAM Size ²	16 MB
Rotational Speed	7,200 RPM

PERFORMANCE SPECIFICATIONS Average Seek time (typical) Average Latency Data Transfer Rate Media to/from Buffer (Max.) Buffer to/from Host (Max.) Drive Ready Time (typical)³ 11 ms 4.13 ms 189 MB/s 300 MB/s

RELIABILITY SPECIFICATIONS	
Non-recoverable Read Error	1 sector in 10 ¹⁴ bits
Controlled Ramp Load/Unload	600.000

ACOUSTICS	
Idle (1D/2D)	2.4 / 2.6 Bel
Performance Seek (1D/2D)	2.6 / 2.8 Bel

POWER REQUIREMENTS	
Voltage	+5V±5%
Spin-up Current (Max.)	1000 mA
Seek (AVG) ⁴	2 W
Read/Write (AVG)	2.5 W
Low Power Idle (AVG)	0.85 W
Standby (AVG)	0.2 W
Sleep (AVG)	0.2 W

ENVIRONMENTAL SPECIFICATIONS	
Temperature	
Operating	5 ~ 55 ℃
Non-operating	-40 ~ 70 ℃
Humidity (non-condensing)	
Operating	5-90 %
Non-operating	5-95 %
Linear Shock (1/2 sine pulse)	
Operating,(2ms) ⁵	325 G
Non-operating, 1ms	900 G
Vibration (10~500 Hz, Ramdom)	
Operating	1.5G
Altitude (relative to sea level)	
Operating	-300 to 3000 m
Non-operating	-400 to 15000 m

PHYSICAL DIMENSION	
Height	9.5 mm
Width	69.85 mm
Length	100.3 mm
Weight 1/2D(max.)	110 / 119 g

- * Note : Design and specifications are subject to change without prior notice.
- 1.1MB = 1,000,000 Bytes, 1GB = 1,000,000,000 Bytes

Accessible capacity may vary as some OS uses binary numbering system

for reported capacity

- 2 A small portion of the 8MB buffer memory is reserved for firmware use
- 3 Power-On to Drive Ready4 30% duty cycle, random seek
- 5 On Track Read Operation

